## WHAT IS CLAIMED IS:

- 1. A method comprising:
  - generating a first clock signal with a first frequency; and utilizing said first clock signal to generate a second clock signal with a second frequency;
  - wherein said second clock frequency is generated by dropping selected pulses of said first clock signal.
- The method of claim 1, wherein utilizing said first clock signal comprises using said first clock signal to 2. select a sequence of values from a storage element.

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- The method of claim 2, wherein said storage element comprises a first and second shift register, and 3. wherein said sequence of values are alternately selected from said registers.
- The method of claim 1, further comprising: 4. counting sequences of pulses of said first clock signal; and detecting said selected pulses of said first clock signal.
  - The method of claim 4, wherein said sequences include a fixed number of pulses, and wherein said selected 5. pulses correspond to particular counts of said pulses within said fixed number of pulses.

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- The method of claim 3, further comprising changing a contents of at least one of said registers at a selected 6. time in order to generate said second clock signal with an increasing frequency.
- 7. A clock circuit comprising:

a first circuit configured to generate a first clock signal; and 25 circuitry configured to utilize said first clock signal to generate a second clock signal with a second frequency, wherein said second clock frequency is generated by dropping selected pulses of said first clock signal.

- The clock circuit of claim 7, further comprising a storage element configured to store a pattern of bits, 30 wherein said circuitry is configured to utilize said first clock signal to select a sequence of values from a storage element.
- The clock circuit of claim 7, wherein said storage element comprises a first and second shift register, and 9. wherein said circuitry is configured to select said sequence of values from said registers in an alternating manner. 35
  - 10. A system comprising:
    - a reference clock generator configured to generate a reference clock signal; and a processor comprising a clock circuit configured to:
- receive said reference clock signal; 40

generate a first clock signal from said reference clock signal; and utilize said first clock signal to generate a second clock signal with a second frequency, wherein said second clock frequency is generated by dropping selected pulses of said first clock signal.

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